ARENARIA HINTONIORUM (CARYOPHYLLACEAE), A NEW GYPSEOUS SPECIES FROM SOUTHERN NUEVO LEON, MEXICO

Billie L. Turner

Department of Botany, University of Texas, Austin, Texas 78713 U.S.A.

ABSTRACT

A new species of Arenaria, A. hintoniorum B.L. Turner, is described from southern Nuevo León, where it is confined to gypseous outcrops. It is related to A. lanuginosa but differs in having nearly glabrous foliage and essentially linear leaves (1.0 mm wide or less).

KEY WORDS: Caryophyllaceae, Arenaria, gypsum, México

Routine identification of Mexican plants has revealed the following novelty.

Arenaria hintoniorum B.L. Turner, sp. nov. TYPE: MEXICO. Nuevo León: Mpio. Aramberri, along road from La Escondida to Aramberri, scattered plants on gypsum hillsides, 1330 m, 23 Oct 1993, G.B. Hinton et al. 23706 (HOLOTYPE: TEX).

Arenariae lanuginosae (Michx.) Rohrb. similis sed foliis linearibus vel anguste lineari-lanceolatis 0.5-1.0 mm latis marginibus glabris vel minute hispidis, floribus minoribus, et seminibus minoribus brunneisque differt.

Stiffly erect or sprawling perennial herbs 1-2 dm high. Stems minutely hispidulous with downcurved hairs, appearing glabrous to the unaided eye. Leaves linear to linear-lanceolate, 10-15 mm long, 0.1-1.0 mm wide, glabrous or nearly so, the margins entire. Flowers mostly arranged 5-11 in rather strict terminal cymes, the pedicels glabrous, 10-25 mm long. Sepals ca. 2.5 mm long, glabrous, the margins scarious. Petals 4-5, narrowly ovate, white, 2.5-3.0 mm long, the apices often revolute. Stamens 8-10, ca. 3 mm long, the anthers white. Ovary ovoid, ca. 2 mm long, glabrous; styles 2-3, separate ca. 1.5 mm

long. Capsule 5-valvate, ca. 3 mm long. Seeds brown, 0.5-0.6 mm long, ca. 0.5 mm wide, the lateral surfaces smooth, the dorsal sides \pm granular ornate, especially near the hilum.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Nuevo León: Mpio. Aramberri, gypsum hillside, 1145 m, 16 Jun 1990, G.B. Hinton et al. 20383 (TEX). Tamaulipas: 18 mi SE of Bustamante towards Tula, 1700 m, "possibly slightly gypseous" soils, 1700 m, 20 May 1973, Johnston et al. 11159A (LL).

This taxon is superficially similar to Arenaria lanuginosa (Michx.) Rohrb., and when first encountered (Hinton 20383) I took the plants concerned to be depauperate or freak forms of that species. The more recent collections clearly differ from A. lanuginosa in having essentially linear, nearly glabrous leaves (vs. elliptic to lance-elliptic), minutely hispidulous vestiture (vs. puberulous or pilose), and smaller brown seeds (ca. 0.5-0.6 mm long vs. 0.7-0.8 mm). Arenaria lanuginosa occurs in the general region of A. hintoniorum, but so far as known the former occurs in pine-oak forests at higher elevations (1600-3200 m) in calcareous soils or among limestone outcrops.

The collection from Tamaulipas cited above has somewhat broader leaves than the Nuevo León collections (0.5-1.0 mm wide vs. 0.1-0.5 mm) with a more hispidulous pubescence, but it has the flowers and seeds of *Arenaria hintoniorum*, hence its inclusion here.

ACKNOWLEDGMENTS

I am grateful to Guy Nesom for the Latin diagnosis, and to him and Alan Prather for reviewing the manuscript.